



ATTACHMENT B

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Bibliography:

Calvin F. Konzak, Project Leader
Academic Rank: Professor Emeritus, Washington State University.
President/CEO: Northwest Plant Breeding Co.,
2001 Country Club Road, Pullman, WA 99163
N. E. 1725 Wheatland Dr., Pullman, WA 99163 (current home address)
Dr. Konzak retired from WSU at the end of December 1993, after 36 years as the Spring Wheat Breeder/Agronomist/Geneticist. Dr. Konzak was awarded Professor Emeritus status and was granted the use of University facilities and equipment as may be needed for basic research. Several cooperative, basic research projects with WSU faculty and with foreign scientists are ongoing.

Education:

Ph.D. (Plant Breeding and Genetics), 1952, Cornell Univ., Ithaca

Professional Experience:

- 9/82-9/83 Special Advisor, Visiting Scientist, Plant Breeding and Genetics Section, Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development, International Atomic Energy Agency, Vienna
- 9/65-8/66 U. S. Public Health Service Senior Scientist Fellowship
- 9/65-8/66 Genetics Consultant to the International Atomic Energy Agency, Vienna, during professional leave.
- 1963-93 Professor of Agronomy and Genetics, and Agronomist, Washington State University, Pullman, Washington
- 1958-63 Associate Professor of Agronomy and Associate Agronomist, Washington State University, Pullman, Washington
- 1951-58 Associate Geneticist, Brookhaven National Laboratory, Biology Department, Ithaca, New York

Research Interests: Wheat breeding and genetics-Improvement of plant breeding technology via anther/microspore culture for dihaploid production: analysis of mechanisms controlling responses to culture. Genetic analyses of plant structural characteristics of wheat. Technological improvement of plant breeding equipment. Pest control by host plant resistance in IPM systems. Control of soil borne diseases through soil amendments. Development of fertilizer materials. Improving methods for analysis of field trials via data collected by remote sensing techniques. Improvement of protein content and processing quality in wheats. Induction and exploitation of induced mutations in cereals and other species. Improvement of methods and techniques in mutation research. Genetic control of processing quality in club, common, and durum wheats. During time at Washington State University 12 SWS, 2 HRS, 2 Durum, 2 Oats were created. Research with NPB has produced 3 spring spelt, 2 HRW waxy wheats, 2 SWW, and herbicide tolerant wheat.

Publications: Total 392

BIBLIOGRAPHY

1. Konzak, C. F., L. F. Randolph and N. F. Jensen. 1951. Embryo culture of barley species hybrids. Journal of Heredity. 42: 124-134.
2. Jensen, N. F., G. C. Kent, and C. F. Konzak. 1951. No title. 1950 National Oat Newsletter. 1: 31-32.
3. Konzak, C. F. 1952. Inheritance of resistance in barley to physiologic races of loose smut, *Ustilago nuda*. Agronomy Abstracts.
4. Konzak, C. F. 1952. A temporary mounting medium for determining pollen abortion percentages. Maize Genetics Cooperation News Letter 26: 7-8.
5. Konzak, C. F. 1953. No title. 1952 National Oat Newsletter. 3: 61.
6. Konzak, C. F. 1953. Inheritance of resistance in barley to physiologic races of *Ustilago nuda*. Phytopathology. 43: 369-375.
7. Konzak, C. F. 1953. The third outer glume character in barley. Journal of Heredity. 44: 103-104.
8. Konzak, C. F. 1954. Stem rust resistance in oats induced by nuclear radiation. Agronomy Journal. 46: 538-540.
9. Konzak, C. F. 1954. No title. 1953 National Oat Newsletter 4: 50-51.
10. Konzak, C. F. 1955. *Helminthosporium victoriae* blight resistance in oats induced by ionizing radiations. Agronomy Abstracts, American Society of Agronomy, Madison. p. 52.
11. Konzak, F. F. 1955. Radiation sensitivity of dormant and germinating barley seeds. Science. 122: 197.
12. Konzak, C. F. 1956. Induction of mutations for disease resistance in cereals. Brookhaven Symposia in Biology. 9: 157-176.
13. Konzak, C. F. 1956. A note on the use of radiation for the production of mutations for Victoria-blight resistance in oats. Phytopathology. 46: 177-148.
14. Konzak, C. F. 1956. A note on the artificial mutation method. 1955 National Oat Newsletter. 6: 68-69.

15. Konzak, C. F., N. E. Borlaug, Aristeo Acosta and John Gibler. 1956. Stripe rust resistance mutants obtained from irradiation of Gabo wheat. Phytopathology. 46: 525-526.
16. Konzak, C. F. and L. R. Randolph. 1956. Radiation and iris breeding. Bulletin American Iris Society. 142: 68-74.
17. Konzak, C. F. and W. R. Singleton. 1956. The effects of thermal-neutron radiation on mutation of endosperm loci in maize. Proc. Natl. Acad. Sci. 42: 78-84.
18. Konzak, C. F. and W. R. Singleton. 1956. The mutation of linked maize endosperm loci induced by thermal-neutron, X-gamma, and ultraviolet radiation. Proc. Natl. Acad. Sci. 42: 239-245.
19. Caldecott, R. S., B. Beard, and C. F. Konzak. 1957. The influence of ion density and environmental factors on the radiosensitivity of seeds. I. The relation of water content of the seed and the conditions of hydration to observed injury. Agronomy Abstracts. American Society of Agronomy, Madison. p. 51.
20. Caldecott, R. S., E. B. Johnson, D. T. North and C. F. Konzak. 1957. Modification of radiation-induced injury by post treatment with oxygen. Proc. Natl. Acad. Sci. 43: 975-983.
21. Caldecott, R. S., C. F. Konzak and E. B. Johnson. 1957. Post-treatment modification of X-ray induced injury in barley by aerobic and anaerobic hydration. Radiation Research. 7(3): 308.
22. Curtis, H. J., N. Delihias, R. S. Caldecott, and C. F. Konzak. 1957. Modification of x-ray damage in dormant seeds by storage. Radiation Research. 7: 311.
23. Konzak, C. F. 1957. No title. 1956 Wheat Newsletter III: 17-18.
24. Konzak, C. F. 1957. Possible new rust resistance in oats obtained in an irradiated population. 1956 National Oat Newsletter 7: 64.
25. Konzak, C. F. 1957. III. Genetic effects of radiation on higher plants. Quarterly Review of Biology. 32: 27-45.
26. Konzak, C. F., 1957. The influence of oxygen on the mutagenic effects of X-rays on maize endosperm loci. Radiation Research. 6: 1-10.

27. Konzak, C. F., R. S. Caldecott, H. J. Curtis, and N. Delihias. 1957. The influence of ion density and environmental factors on the radiosensitivity of seeds. II. The relation of pre- and post-irradiation storage conditions and temperature to observed radiation damage. Agronomy Abstracts. American Society of Agronomy, Madison. p. 56.
28. Curtis, H. J., N. Delihias, R. S. Caldecott and C. F. Konzak. 1958. Modification of radiation damage in dormant seeds by storage. Radiation Research. 8: 526-534.
29. Singleton, W. R., C. F. Konzak, S. Shapiro and A. H. Sparrow. 1958. The contribution of radiation genetics to crop improvement. In: W. Ralph Singleton, ed., Nuclear Radiation in Food and Agriculture. D. Van Nostrand Co., New York. p. 319-330.
30. Sparrow, A. H. and C. F. Konzak. 1958. The use of ionizing radiation in plant breeding: Accomplishments and prospects. In: E. C. Tourje, ed., Camellia Culture. MacMillan Co., New York. p. 425-452.
31. Konzak, C. F. 1959. Induced mutations in host plants for the study of host-parasite interactions. In: Plant Pathology-Problems and Progress (Proc. of the Golden Jubilee Symposium of the American Phytopathological Society). University of Wisconsin Press. p. 202-214.
32. Konzak, C. F. 1959. Radiation-induced mutations for stem rust resistance in oats. Agronomy Journal. 51: 518-520.
33. Konzak, C. F. and R. E. Heiner. 1959. Progress in the transfer of resistance to bunt (Tilletia caries and T. foetida) from Agropyron to wheat. Wheat Information Service. No: 9-10: 31.
34. Kronstad, W. E., R. A. Nilan and C. F. Konzak. 1959. Mutagenic effect of oxygen on barley seeds. Science. 129: 1618.
35. Kronstad, W. E., R. A. Nilan, and C. F. Konzak. 1959. The mutagenic effect of oxygen on barley seeds. 1958 Barley Newsletter. 2: 78-80.
36. Heiner, R. E., C. F. Konzak and R. A. Nilan. 1960. Diethyl sulfate, a highly effective chemical mutagen, producing few chromosome aberrations. Wheat Information Service. No. 11: 4-5.
37. Heiner, R. E., C. F. Konzak, R. A. Nilan and R. R. Legault. 1960. Diverse ratios of mutations to chromosome aberrations in barley treated with diethyl sulfate and gamma rays. Proc. Natl. Acad. Sci. 46: 1215-1221.

38. Kamra, Om P., Saroja K. Kamra, R. A. Nilan and C. F. Konzak. 1960. Radiation response of soaked barley seeds. I. Substances lost by leaching. Hereditas 46: 152-170.
39. Kamra, Om P., Saroja K. Kamra, R. A. Nilan and C. F. Konzak. 1960. Radiation response of soaked barley seeds. II. Relation of radiobiological damage to substances lost by leaching. Hereditas 46: 261-273.
40. Konzak, C. F., H. J. Curtis, N. Delihias and R. A. Nilan. 1960. Modification of radiation induced damage in barley seeds by thermal energy. Canadian Journal of Genetics and Cytology. 2: 129-141.
41. Lofgren, R. A., R. A. Nilan, and C. F. Konzak. 1960. Barley endosperm transplants. 1959 Barley Newsletter 3: 71.
42. Heiner, R. E., C. F. Konzak, and R. A. Nilan. 1961. Further studies on diethyl sulfate. 1960 Barley Newsletter 4: 32-33.
43. Konzak, C. F. 1961. White spring wheat. Winter hardy red spring wheat. Winter hardy white spring wheat. Induced mutations in wheat. Other genetic studies. 1960 Wheat Newsletter. VII: 71-74.
44. Konzak, C. F. and R. E. Heiner. 1961. Progress in the transfer of bunt resistance from Agropyron to wheat. 1960 Wheat Newsletter. VII: 75-76.
45. Konzak, C. F., R. A. Nilan, R. E. Heiner, and E. Froese-Gertzen. 1961. Research with chemical mutagens. 1960 Wheat Newsletter. VII: 74.
46. Konzak, C. F., R. A. Nilan, J. R. Harle and R. E. Heiner. 1961. Control of factors affecting the response of plants to mutagens. Brookhaven Symposia in Biology. No. 14: 128-157.
47. Konzak, C. F., R. A. Nilan, R. R. Legault and R. E. Heiner. 1961. Modification of induced genetic damage in seeds. In: Effects of Ionizing Radiations on Seeds (Proc. Symp. Effects of Ionizing Radiations on Seeds, Karlsruhe, 1960). International Atomic Energy Agency, Vienna. p. 155-169. STI/PUB/13.
48. Nilan, R. A. and C. F. Konzak. 1961. Increasing the efficiency of mutation induction. In: Mutation and Plant Breeding (Proc. Symp. on Mutation and Plant Breeding, Ithaca, 1960). National Academy of Sciences-National Research Council Publ. 891, Washington, DC. p. 437-460.

49. Nilan, R. A., C. F. Konzak, R. R. Legault and J. R. Harle. 1961. The oxygen effect in barley seeds. In: Effects of Ionizing Radiations on Seeds (Proc. Symp. Effects of Ionizing Radiations on Seeds, Karlsruhe, 1960). International Atomic Energy Agency, Vienna. p. 139-154. STI/PUB/13.
50. Qureshi, S. A., F. C. Elliott, R. A. Nilan and C. F. Konzak. 1961. Natural and radiation-induced recombination in Triticum-Agropyron octoploids. Journal of Heredity. 52: 113-117.
51. Heiner, R. E., C. F. Konzak, R. A. Nilan and H. Bartels. 1962. Effect of temperature on in vitro and in vivo reactions of diethyl sulphate. Nature. 194: 788-79.
52. Konzak, C. F. and Z. Csiba. 1962. Results of mutation experiments on wheat. 1961 Wheat Newsletter. VIII: 83-84.
53. Konzak, C. F. and R. E. Heiner. 1962. Progress in the transfer of bunt resistance: To wheat from Agropyron. 1961 Wheat Newsletter. VIII: 82.
54. Konzak, C. F. and R. A. Nilan. 1962. The action of mutagenic agents on barley seeds. In: Proc. 4th Inter-American Symp. on the Peaceful Application of Nuclear Energy (Mexico City, 1962), Vol. 2. Pan American Union, Washington, DC. p. 195-200.
55. Konzak, C. F., O. A. Vogel, and Z. Csiba. 1962. Progress in the development of winter-hardy spring wheats. 1961 Wheat Newsletter. VIII: 82-83.
56. Konzak, C. F., O. A. Vogel, R. A. Nilan, R. E. Allan, and W. L. Nelson. 1962. Field record book for computer analysis of data. 1961 Wheat Newsletter. VIII: 15-17.
57. Nilan, R. A., C. F. Konzak, E. Froese-Gertzen and N. S. Rao. 1962. Analysis of radiation-induced genetic damage in seeds. In: Symp. on Radiation Induced Mutagenesis (Erwin-Baur-Gedachtnisvorlesungen II, Gatersleben, 1961. Akademie-Verlag, Berlin. p. 141-152.
58. Nilan, R. A., C. F. Konzak, J. R. Harle and R. E. Heiner. 1962. Inter-relation of oxygen, water and temperature in the production of radiation-induced genetic effects in plants. In: Strahlenwirkung und Milieu (Suppl. to Strahlentherapie, Vol. 51). Urban & Schwarzenberg, Munich. p. 171-181.
59. Sarvella, Patricia, R. A. Nilan and C. F. Konzak, 1962. Relation of embryo structure, node position, tillering and depth of planting to the effects of X-rays in barley. Radiation Botany. 2: 89-108.

49. Nilan, R. A., C. F. Konzak, R. R. Legault and J. R. Harle. 1961. The oxygen effect in barley seeds. In: Effects of Ionizing Radiations on Seeds (Proc. Symp. Effects of Ionizing Radiations on Seeds, Karlsruhe, 1960). International Atomic Energy Agency, Vienna. p. 139-154. STI/PUB/13.
50. Qureshi, S. A., F. C. Elliott, R. A. Nilan and C. F. Konzak. 1961. Natural and radiation-induced recombination in Triticum-Agropyron octoploids. Journal of Heredity. 52: 113-117.
51. Heiner, R. E., C. F. Konzak, R. A. Nilan and H. Bartels. 1962. Effect of temperature on in vitro and in vivo reactions of diethyl sulphate. Nature. 194: 788-79.
52. Konzak, C. F. and Z. Csiba. 1962. Results of mutation experiments on wheat. 1961 Wheat Newsletter. VIII: 83-84.
53. Konzak, C. F. and R. E. Heiner. 1962. Progress in the transfer of bunt resistance: To wheat from Agropyron. 1961 Wheat Newsletter. VIII: 82.
54. Konzak, C. F. and R. A. Nilan. 1962. The action of mutagenic agents on barley seeds. In: Proc. 4th Inter-American Symp. on the Peaceful Application of Nuclear Energy (Mexico City, 1962), Vol. 2. Pan American Union, Washington, DC. p. 195-200.
55. Konzak, C. F., O. A. Vogel, and Z. Csiba. 1962. Progress in the development of winter-hardy spring wheats. 1961 Wheat Newsletter. VIII: 82-83.
56. Konzak, C. F., O. A. Vogel, R. A. Nilan, R. E. Allan, and W. L. Nelson. 1962. Field record book for computer analysis of data. 1961 Wheat Newsletter. VIII: 15-17.
57. Nilan, R. A., C. F. Konzak, E. Froese-Gertzen and N. S. Rao. 1962. Analysis of radiation-induced genetic damage in seeds. In: Symp. on Radiation Induced Mutagenesis (Erwin-Baur-Gedachtnisvorlesungen II, Gatersleben, 1961. Akademie-Verlag, Berlin. p. 141-152.
58. Nilan, R. A., C. F. Konzak, J. R. Harle and R. E. Heiner. 1962. Inter-relation of oxygen, water and temperature in the production of radiation-induced genetic effects in plants. In: Strahlenwirkung und Milieu (Suppl. to Strahlentherapie, Vol. 51). Urban & Schwarzenberg, Munich. p. 171-181.
59. Sarvella, Patricia, R. A. Nilan and C. F. Konzak, 1962. Relation of embryo structure, node position, tillering and depth of planting to the effects of X-rays in barley. Radiation Botany. 2: 89-108.

60. Enns, H. and C. F. Konzak. 1963. Progress in the genetic analysis of variegated pericarp in wheat. 1962 Wheat Newsletter IX: 74.
61. Froese-Gertzen, Edith E., C. F. Konzak, R. Foster and R. A. Nilan. 1963. Correlation between some chemical and biological reactions of ethyl methanesulphonate. Nature 198: 447-448.
62. Froese-Gertzen, Edith E., R. A. Nilan, C. F. Konzak and R. R. Legault. 1963. Effects of n-butyl methanesulphonate and related mutagens on barley. Nature. 200: 714-715.
63. Heiner, R. E., E. E. Froese-Gertzen, C. F. Konzak, and R. A. Nilan. 1963. Increasing the efficiency of chemical mutagens. 1962 Wheat Newsletter. IX: 71-73.
64. Konzak, C. F. and Z. Csiba. 1963. Winter-hardy spring wheat breeding. 1962 Wheat Newsletter. IX: 76-77.
65. Konzak, C. F., H. Enns, and J. Dickey. 1963. Mutants induced in wheat by chemicals. 1962 Wheat Newsletter. IX: 75.
66. Konzak, C. F. and J. B. Powell. 1963. Bagging system for controlling cross-pollination of wheats in genetic tests. 1962 Wheat Newsletter. IX: 70-71.
67. Botchek, C. M., C. F. Konzak and R. A. Nilan. 1964. Design of the ⁶⁰Co facility at Washington State University. IEEE Transactions. PEP 8: 2-8.
68. Froese-Gertzen, Edith E., C. F. Konzak, R. A. Nilan and R. E. Heiner, 1964. The effect of ethyl methanesulfonate on the growth response, chromosome structure, and mutation rate in barley. Radiation Botany. 4: 61-69.
69. Konzak, C. F., J. Dickey, and L. Bacon. 1964. Induced semi-dwarf mutations in durum. 1963 Wheat Newsletter. X: 75.
70. Konzak, C. R., M. A. Faulkner, and G. B. Milner. 1964. Progress toward a uniform cereal test data reporting and mechanized processing system at WSU. 1963 Wheat Newsletter. X: 4-6.
71. Konzak, C. F., R. A. Nilan, R. J. Foster, and R. R. Legault. 1964. Chemically induced mutation. 1963 Barley Newsletter. 7: 30-31.
72. Konzak, C. F., R. A. Nilan, R. J. Foster, and R. R. Legault. 1964. Chemically induced mutation. 1963 Wheat Newsletter. X: 74-75.

73. Nilan, R. A., C. F. Konzak, R. E. Heiner and Edith E. Froese-Gertzen. 1964. Chemical mutagenesis in barley. In: Barley Genetics I (Proc. First International Barley Genetics Symposium, Wageningen, 1963). Pudoc, Centre for Agricultural Publications and Documentation, Wageningen. p. 35-54.
74. Berg, C. C., R. A. Nilan and C. F. Konzak. 1965. The effect of pressure and seed water content on the mutagenic action of oxygen in barley seeds. Mutation Research. 2: 263-273.
75. Berg, C. C., R. A. Nilan, and C. F. Konzak. 1965. The effect of pressure and seed water content on the mutagenic action of oxygen in barley seeds. 1964 Barley Newsletter. 8: 36.
76. Bruehl, G. W., H. M. Austenson, P. C. Crandall, and C. F. Konzak. 1965. Possible new oat varieties for Western Washington. 1964 Oat Newsletter. 15: 57-58.
77. Conger, B. V., R. A. Nilan, C. F. Konzak, and S. Metter. 1965. The influence of seed water content on the oxygen effect in irradiated barley seeds. 1964 Barley Newsletter. 8: 38.
78. Enns, Henry and C. F. Konzak. 1965. Genetically controlled somatic instability in *Triticum aestivum*. 1964 Wheat Newsletter. XI: 99-100.
79. Konzak, C. F. 1965. Plant breeding. In: McGraw-Hill Encyclopedia of Science and Technology. p. 319-321.
80. Konzak, C. F., R. A. Nilan, Edith E. Froese-Gertzen and R. J. Foster. 1965. Factors affecting the biological action of mutagens. In: J. Veleminsky and T. Gichner, eds., Induction of Mutations and the Mutation Process (Proc. Symp., Prague, 1963). Publishing House of the Czecho-Slovak Academy of Sciences, Prague. p. 123-132.
81. Konzak, C. F., R. A. Nilan, J. Wagner and R. J. Foster. 1965. Efficient chemical mutagenesis. In: The Use of Induced Mutations in Plant Breeding (Suppl. to Radiation Botany, Vol. 5). Pergamon Press Ltd., Oxford. p. 49-70.
82. Konzak, C. F., J. H. Wagner, R. A. Nilan, Sylvia C. Metter, and P. K. Rao. 1965. Some new results with chemical mutagens. 1964 Barley Newsletter. 8: 35-36.
83. Konzak, C. F., J. H. Wagner, R. A. Nilan, Sylvia C. Metter, and P. K. Rao. 1965. Some new results with chemical mutagens. 1964 Wheat Newsletter. XI: 99.

84. Konzak, C. F. and C. A. Watson. 1965. Progress report on research toward a uniform system for reporting and computer processing cereal test data. 1964 Barley Newsletter. 8: 5-7
85. Konzak, C. F. and C. A. Watson. 1965. Progress report on research toward a uniform system for reporting and computer processing cereal test data. 1964 Wheat Newsletter. XI: 21-23.
86. Nilan, R. A., C. F. Konzak, J. Wagner and R. R. Legault. 1965. Effectiveness and efficiency of radiations for inducing genetic and cytogenetic changes. In: The Use of Induced Mutations in Plant Breeding (Suppl. to Radiation Botany, Vol. 5). Pergamon Press Ltd., Oxford. p. 71-89.
87. Rao, P. K. Mohan, C. F. Konzak, R. A. Nilan and S. S. Dhesi. 1965. The influence of hydrogen ion concentration on radiation-induced damage in barley. Radiation Botany. 5:455-463.
88. Rao, P. K. Mohan, C. F. Konzak, R. A. Nilan, and S. S. Dhesi. 1965. The influence of hydrogen ion concentration on radiation-induced damage in barley. 1964 Barley Newsletter. 8: 39.
89. Spence, R. K., R. A. Nilan, and C. F. Konzak. 1965. The influence of sodium azide on the biological effects of ionizing radiation in moist barley seeds. 1964 Barley Newsletter. 8: 37.
90. Conger, B. V., R. A. Nilan, C. F. Konzak and S. Metter. 1966. The influence of seed water content on the oxygen effect in irradiated barley seeds. Radiation Botany. 6: 129-144.
91. Enns, Henry and C. F. Konzak. 1966. Genetically controlled seedcoat color variegation in *Triticum aestivum*. Genetics. 53: 1091-1099.
92. Konzak, C. F. 1966. Proposal for a uniform system of numbering varieties and selection and of recording hybrid parentages for use with data processing machines. 1965 Barley Newsletter. 9: 51-57.
93. Konzak, C. F. 1966. Proposal for a uniform system of numbering varieties and selection and of recording hybrid parentages for use with data processing machines. 1965 Oat Newsletter. 16: 49-54.
94. Konzak, C. F. 1966. Proposal for a uniform system of numbering cultivars and selection and of recording hybrid parentages for use with data processing machines. 1965 Wheat Newsletter. XII: 25-30.

95. Konzak, C. F. 1966. Report of expert group assembled to consider "International standardization of procedures for integration and mechanization of crop research data and recording and processing." 1965 Oat Newsletter. 16: 69-80.
96. Konzak, C. F. 1966. Report of expert group assembled to consider "International standardization of procedures for integration and mechanization of crop research data and recording and processing." 1965 Wheat Newsletter. XII: 12-24.
97. Konzak, C. F. 1966. Development of genetic methods for wheat improvement (A progress report). In: Mutations in Plant Breeding (Proc. of a Panel, Vienna, 1966). International Atomic Energy Agency, Vienna. p. 173-175. STI/PUB/129.
98. Konzak, C. F. 1966. Report of an expert group which met to consider international standardization, integration and mechanization of crop data recording and processing'. In: Mutations in Plant Breeding (Proc. of a Panel, Vienna, 1966). International Atomic Energy Agency, Vienna. p. 241-248. STI/PUB/129.
99. Konzak, C. F., R. A. Nilan, Edith E. Froese-Gertzen and I. A. Ramirez. 1966. Physical and chemical mutagens in wheat breeding. In: James MacKey, ed., Proc. Second International Wheat Genetics Symposium, Lund, 1963 (Suppl. to Hereditas, Vol. 2). Berlingska Boktryckeriet, Lund. p. 65-84.
100. Konzak, C. F. and B. Sigurbjornsson. 1966. International cooperation in standardization of procedures in crop research data recording (Fifth Yugoslav Symposium on Research in Wheat). Contemporary Agriculture. 11-12: 691696.
101. Konzak, C. F. and B. Sigurbjornsson. 1967. Developments toward a coordinated programme of research on the use of neutrons in seed irradiation. In: Neutron Irradiation of Seeds. Technical Reports Series No. 76. International Atomic Energy Agency, Vienna. p. 35-39. STI/DOC/10/76.
102. Konzak, C. F., B. Sigurbjornsson, and G. E. Delhove. 1967. Towards international standardization in crop research data recording. Plant Introduction Newsletter. 19: 8-9.
103. Konzak, C. F., B. Sigurbjornsson, and G. Delhove. 1967. Towards international standardization in crop research data recording. Wheat Newsletter. XIII: 20-21.

104. Konzak, C. F., K. Mikaelson, B. Sigurbjornsson and A. Burtscher. 1967. Recommended standard procedures for irradiating, cultivating and measuring cereal seeds to determine the effects of neutron irradiation in the neutron-seed-irradiation programme. In: Neutron Irradiation of Seeds. Technical Reports Series No. 76. International Atomic Energy Agency, Vienna. p. 103-07. STI/DOC/10/76.
105. Myhill, R. R. and C. F. Konzak. 1967. A new technique for culturing and measuring barley seedlings. Crop Science. 7: 275-276.
106. Sigurbjornsson, B. and C. F. Konzak. 1967. International programmes on the use of radiation and isotopes in plant breeding and genetics research. 1966 Oat Newsletter. 17: 7-9.
107. Sigurbjornsson, B. and C. F. Konzak. 1967. International programmes on the use of radiation and isotopes in plant breeding and genetics research. 1966 Wheat Newsletter. XIII: 22-24.
108. Brunner, Von H., K. Mikaelson, K. Hagl and C. F. Konzak. 1968. Methodische Untersuchungen beeinflussender Faktoren in der Diathylsulfat-Mutagen-wirkung bei Gerste (Methodological studies on factors influencing the mutagenic effect of DES in barley). Die Bodenkultur. 19: 336-345. (English Summary).
109. Conger, B. V., R. A. Nilan and C. F. Konzak. 1968. Post-irradiation oxygen sensitivity of barley seeds varying slightly in water content. Radiation Botany. 8: 31-36.
110. Conger, B. V., R. A. Nilan and C. F. Konzak. 1968. Radiobiological damage: A new class identified in barley seeds stored after irradiation. Science. 162: 1142-1143.
111. Conger, B. V., J. R. Hileman, R. A. Nilan, and C. F. Konzak. 1968. The influence of temperature during irradiation on the post-irradiation oxygen effect in barley seeds. 1967 Barley Newsletter. 11: 33-34.
112. Donaldson, E., R. A. Nilan, and C. F. Konzak. 1968. The influence of oxygen concentration on the post-irradiation oxygen effect in barley seeds. 1967 Barley Newsletter. 11: 34-37.
113. Konzak, C. F. 1968. Progress toward a world plant germ plasm record system. 1967 Barley Newsletter. 11: 30-31.
114. Konzak, C. F. 1968. Progress toward a world plant germ plasm record system. 1967 Oat Newsletter. 18: 23-25.

115. Konzak, C. F. 1968. Progress toward a world plant germ plasm record system. 1967 Wheat Newsletter. XIV: 4-6.
116. Konzak, C. F., P. J. Bottino, R. A. Nilan and B. V. Conger. 1968. Irradiation of seeds: A review of procedures employed at Washington State University. In: Neutron Irradiation of Seeds II (Proc. of a Panel, Vienna, 1967), Technical Reports Series No. 92. International Atomic Energy Agency, Vienna. p. 83-96. STI/DOC/10/92.
117. Konzak, C. F., G. W. Bruehl, H. M. Austenson, P. C. Crandall and K. J. Morrison. 1968. Registration of Cayuse oats. Crop Science. 8: 399.
118. Konzak, C. F., G. Delhove, and B. Sigurbjornsson. 1968. A world plant genetic resources information system. In: Proceedings of the XII International Congress of Genetics, Vol. 1. Tokyo, Japan. p. 259.
119. Konzak, C. F., K. J. Morrison, and G. W. Bruehl. 1968. Oat research at Washington State University. 1967 Oat Newsletter. 18: 51-54.
120. Konzak, C. F., K. J. Morrison, and H. C. Murphy. 1968. Codes for uniform oat nurseries. 1967 Oat Newsletter. 18: 25.
121. Konzak, C. F. and K. R. Narayanan, 1968. Influence of presoaking on the biological response of barley seeds to diethyl sulfate. 1967 Barley Newsletter. 11: 28-29.
122. Konzak, C. F., I. Ramirez-A. and S. C. Woo. 1968. Development of genetic methods for wheat improvement (Progress report). In: Mutations in Plant - Breeding II (Proc. of a Panel, Vienna, 1967). International Atomic Energy Agency, Vienna. p. 183-192. STI/PUB/182.
123. Konzak, C. F., J. H. Wagner, R. R. Legault, G. Kerstetter, S. Manvi, and I. Wickham. 1968. Influence of chemical structure on the biological activity of some alkyl alkanesulfonates. 1967 Barley Newsletter. 11: 26.
124. Narayanan, K. R. and C. F. Konzak. 1968. Effect of storage on diethylsulfate-induced damage in barley. 1967 Barley Newsletter. 11: 26-28.
125. Purdy, Laurence, H., W. Q. Loegering, C. F. Konzak, C. J. Peterson and R. E. Allan. 1968. A proposed standard method for illustrating pedigrees of small grain varieties. Crop Science. 8: 405-406.
126. Ramirez, I. A., R. E. Allan, and C. F. Konzak. 1968. Studies of heterosis between different sources of semi-dwarfing in wheat. 1967 Wheat Newsletter. XIV: 100-101.

127. Reitz, L. P., L. W. Briggles, F. H. McNeal, C. F. Konzak, and K. J. Morrison. 1968. Code numbers for USDA uniform wheat nurseries. 1967 Wheat Newsletter. XIV: 12-13.
128. Sideris, E. G., R. A. Nilan, and C. F. Konzak. 1968. The influence of sodium azide post-treatments on the effect of ionizing radiation on barley seeds. 1967 Barley Newsletter. 11: 39-42.
129. Wagner, J. H., Maher M. Nawar, C. F. Konzak and R. A. Nilan. 1968. The influence of pH on the biological changes induced by ethyleneimine in barley. Mutation Research. 5: 57-64.
130. Conger, B. V., C. F. Konzak and J. R. Harle. 1969. A glass manifold vacuum system for controlling atmosphere and water content of seeds for irradiation experiments. Radiation Botany. 9: 425-427.
131. Conger, B. V., R. A. Nilan and C. F. Konzak. 1969. The role of water content in the decay of radiation-induced oxygen-sensitive sites in barley seeds during post-irradiation hydration. Radiation Research. 39: 4-56.
132. Konzak, C. F. 1969. Progress report on studies toward increased international standardization in crop research data recording and toward a world plant germplasm records system. 1968 Barley Newsletter 12: 34-35.
133. Konzak, C. F. 1969. Progress report on studies toward increased international standardization in crop research data recording and toward a world plant germplasm records system. 1968 Oat Newsletter. 19: 7-8.
134. Konzak, C. F. 1969. Progress report on studies toward increased international standardization in crop research data recording and toward a world plant germplasm records system. 1968 Wheat Newsletter. XV: 17-18.
135. Konzak, C. F. and K. J. Morrison. 1969. No title. 1968 Oat Newsletter. 19: 28-29.
136. Konzak, C. F. and S. M. Dietz. 1969. Documentation for the conservation, management, and use of plant genetic resources. Economic Botany. 23: 299-308.
137. Konzak, C. F., S. C. Woo and J. Dickey. 1969. An induced dominant semi-dwarf plant height mutation in spring wheat. Wheat Information Service. No. 28: 10.
138. Konzak, C. F., I. A. Ramirez, S. C. Woo, and Mir Sadam. 1969. New semi-dwarfing genes in wheat. 1968 Wheat Newsletter. XV: 121-122.

139. Narayanan, K. R. and C. F. Konzak, 1969. Influence of post-treatment on the mutagenic efficiency of alkylating agents. 1968 Barley Newsletter. 12: 31-33.
140. Narayanan, K. R. and C. F. Konzak. 1969. Influence of chemical post-treatments on the mutagenic efficiency of alkylating agents. In: Induced Mutations in Plants (Proc. FAO/IAEA Symp. on the Nature, Induction and Utilization of Mutations in Plants, Pullman, Washington, 1969). International Atomic Energy Agency, Vienna. p. 281-304. STI/PUB/231.
141. Purdy, L. H., W. Q. Loegering, C. F. Konzak, C. J. Peterson, and R. E. Allan. 1969. A proposed standard method for illustrating pedigrees of small grain varieties. 1968 Barley Newsletter. 12: 36.
142. Purdy, L. H., W. Q. Loegering, C. F. Konzak, C. J. Peterson, and R. E. Allan. 1969. A proposed standard method for illustrating pedigrees of small grain varieties. 1968 Oat Newsletter. 19: 7.
143. Purdy, L. H., W. Q. Loegering, C. F. Konzak, C. J. Peterson, and R. E. Allan. 1969. A proposed standard method for illustrating pedigrees of small grain cultivars. 1968 Wheat Newsletter. XV: 19-20.
144. Ramirez, I. A., R. E. Allan, C. F. Konzak and W. A. Becker. 1969. Combining ability of winter wheat. In: Induced Mutations in Plants (Proc. FAO/IAEA Symp. on the Nature, Induction and Utilization of Mutations in Plants, Pullman, Washington, 1969). International Atomic Energy Agency, Vienna. p. 445-455. STI/PUB/231.
145. Ramirez, I. A., R. E. Allan, and C. F. Konzak. 1969. Combining ability in winter wheat. 1968 Wheat Newsletter. XV: 122-123.
146. Sideris, E. G., C. F. Konzak, and I. A. Ramirez. 1969. Peroxidase activity and semi-dwarfism in wheat. 1968 Wheat Newsletter. XV: 119-120.
147. Sideris, E. G., R. A. Nilan and C. F. Konzak. 1969. Relationship of radiation-induced damage in barley seeds to the inhibition of certain oxidoreductases by sodium azide. In: Induced Mutations in Plants (Proc. FAO/IAEA Symp. on the Nature, Induction and Utilization of Mutations in Plants, Pullman, Washington, 1969). International Atomic Energy Agency, Vienna. p. 313-322. STI/PUB/231.

148. Wickham, Irene M., K. R. Narayanan and C. F. Konzak, 1969. Influence of pH and concentration of phosphate buffer on the degradation of alkyl alkanesulphonates. In: Induced Mutations in Plants (Proc. FAO/IAEA Symp. on the Nature, Induction and Utilization of Mutations in Plants, Pullman, WA, 1969). International Atomic Energy, Vienna. p.153-167. STI/PUB/231/.
149. de Kock, M. J. and C. F. Konzak. 1970. Influence of hydrogen ion concentration on the mutagenic efficiency of N-methyl-N-nitrosourea. 1969 Barley Newsletter. 13: 40-41.
150. Konzak, C. F. 1970. Progress report on studies toward increased international standardization in crop research data recording and toward a world plant germplasm records system. 1969 Barley Newsletter. 13: 34-36.
151. Konzak, C. F. 1970. Progress report on studies toward increased international standardization in crop research data recording and toward a world plant germ plasm records system. 1969 Oat Newsletter. 20: 50-51.
152. Konzak, C. F. 1970. Progress report on studies toward increased international standardization in crop research data recording and toward a world plant germplasm records system. 1969 Wheat Newsletter. XVI: 1-3.
153. Konzak, C. F., Basri Devecioglu, Ulku Devecioglu, J. C. Craddock, R. D. Dutton and T. A. McCoy. 1970. Geographic distribution of origin sites for wheats from Turkey in the USDA World Collection. 1969 Wheat Newsletter. XVI: 3-5.
154. Konzak, C. F. and E. Donaldson. 1970. No title. 1969 Oat Newsletter. 20: 73-74.
155. Konzak, C. F., Mir Sadam, and I. Ramirez-A. 1970. Identification of semidwarfing genes in wheat. Agronomy Abstracts (1970 Annual Meetings, Tucson, Arizona, August 1970). American Society of Agronomy, Madison. p. 14.
156. Konzak, C. F. and W. E. Walden. 1970. Problems in the management of information on the genetic resources. Agronomy Abstracts (1970 Annual Meetings, Tucson, Arizona, August 1970). American Society of Agronomy, Madison. p. 23.
157. Konzak, C. F., S. C. Woo, J. L. Dickey, and E. Donaldson. 1970. A completely dominant semi-dwarf mutant in Marfed spring wheat. 1969 Wheat Newsletter. XVI: 140.
158. Narayanan, K. R. and C. F. Konzak. 1970. The influence of post-treatment storage on the biological effects of alkylating agents in barley. 1969 Barley Newsletter. 13: 38-39.

159. Nawar, Maher M., C. F. Konzak, and R. A. Nilan. 1970. Influence of chemical structure on the biological activity of some beta-chloro-ethylamines and ethylenimine. 1969 Barley Newsletter. 13: 37-38.
160. Sadam, Mir, I. A. Ramirez, R. E. Allan, C. F. Konzak, and E. Donaldson. 1970. Genetic analyses of semidwarfing in wheat. 1969 Wheat Newsletter. XVI: 138-139.
161. Sadam, Mir, C. F. Konzak, K. J. Morrison, W. S. Tate, and T. P. Bogyo, 1970. Maximum response as the environment index describing varietal adaptability. Agronomy Abstracts (1970 Annual Meetings, Tucson, Arizona, August 1970). American Society of Agronomy, Madison. p. 18.
162. Wickham, Irene and C. F. Konzak. 1970. Influence of buffer and buffer concentration on mutagenic efficiency of iPMS and dES. 1969 Barley Newsletter. 13: 39-40.
163. deKock, M. J., C. F. Konzak, and E. Donaldson. 1971. Influence of pH and cell stage on the frequency and spectrum of mutations induced in barley and wheat by N-methyl-N-nitrosourea. Agronomy Abstracts (1971 Annual Meetings, New York City, New York, Aug. 15-20, 1971). American Society of Agronomy, Madison. p. 5.
164. Hu, M. L., C. F. Konzak, and E. Donaldson. 1971. Complementary interactions between induced mutant semidwarfing genes in *Triticum aestivum* L. Agronomy Abstracts (1971 Annual Meetings, New York City, New York, Aug. 15-20, 1971). American Society of Agronomy, Madison. p. 9.
165. Konzak, C. F. 1971. Progress in studies toward international standardization in crop research data recording. 1970 Annual Wheat Newsletter. XVII: 15-17.
166. Konzak, C. F. 1971. Progress in studies toward international standardization in crop research data recording. 1970 Barley Newsletter. 14: 24-26.
167. Konzak, C. F. 1971. Progress in studies toward international standardization in crop research data recording. 1970 Oat Newsletter. 21: 14-15.
168. Konzak, C. F. and E. Donaldson. 1971. Durum research. 1970 Annual Wheat Newsletter. XVII: 130-131.
169. Konzak, C. F., E. Donaldson, M. J. de Kock, M. L. Hu, and Mir Sadam. 1971. Mutation and genetics research. 1970 Annual Wheat Newsletter. XVII: 131-132.

170. Konzak, C. F., E. Donaldson, K. J. Morrison, P. E. Reisenauer, and M. A. Davis. 1971. No title. 1970 Oat Newsletter. 21: 39.
171. Konzak, C. F., E. Donaldson, and W. L. Nelson. 1971. Spring wheat research. 1970 Annual Wheat Newsletter. XVII: 132-133.
172. Hu, M. L., G. Favret, E. A. Favret, C. F. Konzak, E. Donaldson, and R. E. Allan. 1972. Inheritance of insensitivity to gibberellic acid and of semidwarfing in wheat. Annual Wheat Newsletter. XVIII: 147-148.
173. Konzak, C. F. 1972. Report on progress towards international standardization in crop research data recording. Annual Wheat Newsletter. XVIII: 14.
174. Konzak, C. F. 1972. Report on progress towards international standardization in crop research data recording. 1971 Barley Newsletter. 15: 109-110.
175. Konzak, C. F. 1972. Report on progress towards international standardization in crop research data recording. 1971 Oat Newsletter. 22: 27.
176. Konzak, C. F. 1972. Induced mutation research in wheat. In: Induced Mutations and Plant Improvement (Proc. of a Study Group Meeting, Buenos Aires, 1970). International Atomic Energy Agency, Vienna. p. 323-329. STI/PUB/297.
177. Konzak, C. F. 1972. Progress towards international standardized documentation of genetic resource collections from plant explorations. Agronomy Abstracts (1972 Annual Meetings, Miami Beach, Florida, Oct. 29-Nov. 2, 1972). American Society of Agronomy, Madison. p. 13.
178. Konzak, C. F., M. A. Davis, G. W. Bruehl, E. Donaldson, and K. J. Morrison. 1972. Oats in Washington State. 1971 Oat Newsletter. 22: 56.
179. Konzak, C. F., E. Donaldson, and M. J. de Kock. 1972. New mutants induced in wheat. Annual Wheat Newsletter. XVIII: 145-146.
180. Konzak, C. F. and E. A. Favret. 1972. Seed meristems as radiobiological test systems. In: Morton W. Miller and Charles C. Kuehnert, eds., The Dynamics of Meristem Cell Populations (Proc. of a Conference, Rochester, New York, 1971). Plenum Press, New York. p. 227-249.
181. Konzak, C. F., I. M. Wickham, and E. Donaldson. 1972. Control of the increased injury caused by redrying EMS treated seeds. 1971 Barley Newsletter. 15: 110-112.

182. Konzak, C. F., I. M. Wickham and M. J. de Kock. 1972. Advances in methods of mutagen treatment. In: Induced Mutations and Plant Improvement (Proc. of a Study Group Meeting, Buenos Aires, 1970). International Atomic Energy Agency, Vienna. p. 95-119. STI/PUB/297.
183. Niknejad, M., C. F. Konzak, E. Donaldson, I. Wickham, R. A. Nilan, and C. Sander. 1972. Azide, a potent new mutagen- Near additivity of mutation yields from post-treatment combination of barley treated with N-methyl, N-nitrosourea. Agronomy Abstracts (1972 Annual Meetings, Miami Beach, Florida, Oct. 29-Nov. 2, 1972). American Society of Agronomy, Madison. p. 27.
184. Ramirez, I., C. Sanz and C. F. Konzak. 1972. Mutaciones inducidas y programa de mejoramiento del trigo en Chile. (Induced mutations and the wheat improvement program in Chile). In: Induced Mutations and Plant Improvement (Proc. of a Study Group Meeting, Buenos Aires, 1970). International Atomic Energy Agency, Vienna. p. 425-433. STI/PUB/297 (English Summary).
185. Sander, C., A. Kleinhofs, C. Konzak, and R. A. Nilan. 1972. Kinetic studies on the induction of the inhibition of repair of radiation damage in barley. Barley Genetics Newsletter. 2: 71.
186. Hu, M. L., G. Favret, C. F. Konzak, E. A. Favret, E. Donaldson, and R. E. Allan. 1973. Genetic association of gibberellic acid insensitivity and semidwarfing in certain wheats. Annual Wheat Newsletter. XIX: 145.
187. Hu, M. L. and C. F. Konzak. 1973. On the origin, world distribution and relationships among certain semidwarf wheats. Annual Wheat Newsletter. XIX: 144.
188. Konzak, C. F. 1973. Report of progress in international standardization of methods of crop research data recording and management of information on genetic resources. Annual Wheat Newsletter. XIX: 2.
189. Konzak, C. F. 1973. Report of progress in international standardization of methods of crop research data recording and management of information on genetic resources. 1972 Barley Newsletter. 16: 28-29.
190. Konzak, C. F. 1973. Report of progress in international standardization of methods of crop research data recording and management of information on genetic resources. 1972 Oat Newsletter. 23: 29-30.

191. Konzak, C. F. 1973. Using mutagens and mutations in wheat breeding and genetics research. In: E. R. Sears and L. M. S. Sears, eds., Proc. Of the Fourth International Wheat Genetics SYmD. Missouri Agricultural Experiment Station, Columbia, Missouri. p. 275-281.
192. Konzak, C. F. 1973. The documentation of collections and information management by genetic resources centres. In: J. G. Hawkes and W. Lange, eds., Proc. of a Conference on European and Regional Gene Banks, Izmir, Turkey, April 10-15, 1972. EUCARPIA, Wageningen. p. 82.
193. Konzak, C. F. and E. Donaldson. 1973. New cultivars of spring wheat. Annual Wheat Newsletter. XIX: 145.
194. Konzak, C. F., E. Donaldson, and M. A. Davis. 1973. Mutations in wheat. Annual Wheat Newsletter. XIX: 148.
195. Konzak, C. F., E. Donaldson, and M. A. Davis. 1973. Increasing protein content and nutritional quality in hard red spring and winter wheats. Annual Wheat Newsletter. XIX: 142-143.
196. Konzak, C. F., E. Donaldson, M. A. Davis, and M. L. Hu. 1973. *T.turgidum durum*. Annual Wheat Newsletter. XIX: 143.
197. Konzak, C. F., E. Donaldson, M. A. Davis, K. J. Morrison, and G. W. Bruehl. 1973. Oats research in Washington. 1972 Oat Newsletter. 23: 55.
198. Konzak, C. F., M. Niknejad, I. Wickham, and E. Donaldson. 1973. I. Effects of azide applied after treatment of barley seeds with dES and MNH. II. Influence of post-washing prior to redrying and storage on injury and mutation yield of seeds treated with ethyl methanesulfonate (EMS). 1972 Barley Newsletter 16: 27-28.
199. Nilan, R. A., E. G. Sideris, A. Kleinhofs, C. Sander and C. F. Konzak. 1973. Azide-A potent mutagen. Mutation Research. 17: 142-144.
200. Sadam, Mir and C. F. Konzak. 1973. Genetic association of low response to gibberellin with semi-dwarfing in certain durum wheats. Annual Wheat Newsletter. XIX: 141-142.
201. Hu, M. L. and C. F. Konzak. 1974. Genetic association gibberellic acid insensitivity and semi-dwarfing in hexaploid wheat. Annual Wheat Newsletter. XX: 184-185.
202. Hu, M. L. and C. F. Konzak. 1974. Possible origin and relationships of semi-dwarfing genes in the Japanese Norin semi-dwarf wheats. Annual Wheat Newsletter. XX: 182.

203. Kleinhofs, A., C. Sander, R. A. Nilan and C. F. Konzak. 1974. Azide mutagenicity-Mechanism and nature of mutants produced. In: Polyploidy and Induced Mutations in Plant Breeding (Proc. of two meetings organized by the Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture and EUCARPIA, Bari, 1972). International Atomic Energy Agency, Vienna. p. 195-199. STI/PUB/359.
204. Konzak, C. F. 1974. Progress toward international standardization in crop research data recording. Annual Wheat Newsletter. XX: 2-3.
205. Konzak, C. F. 1974. Progress toward international standardization in crop research data recording. 1973 Oat Newsletter. 24: 50-51.
206. Konzak, C. F. 1974. Registration of Wandell durum wheat. Crop Science. 14: 910.
207. Konzak, C. F., E. Donaldson, M. L. Hu, and M. A. Davis. 1974. Spring wheat breeding. Annual Wheat Newsletter. XX: 182-184.
208. Konzak, C. F. and E. Donaldson. 1974. Registration of Wared wheat. Crop Science. 14: 910.
209. Line, R. F., C. F. Konzak and R. E. Allan. 1974. Evaluating resistance to *Puccinia striiformis* in wheat. In: Induced Mutations for Disease Resistance in Crop Plants (Proc. of a meeting, Novi Sad, 1973). Inter-national Atomic Energy Agency, Vienna. p. 125-132. STI/PUB/388.
210. Zadoks, J. C., T. T. Chang and C. F. Konzak. 1974. A decimal code for the growth stages of cereals. Weed Research. 14: 415-421.
211. Zadoks, J. C., T. T. Chang and C. F. Konzak. 1974. A decimal code for the growth stages of cereals. EUCARPIA Bulletin No. 7, January 1974. Wageningen, The Netherlands.
212. Bogyo, T. P., T. S. Russell and C. F. Konzak. 1975. The analysis of genotype-environment interaction on Durum wheat. In: G. T. Scarascia-Mugnozza, ed., Proc. of the Symp. on Genetics and Breeding of Durum Wheat (Bari, 1973). Library of the Faculty of Agriculture, Bari, and National Institute for Nutrition, Rome. p. 413-435.
213. Konzak, C. F. 1975. Origin of high lysine wheats. Annual Wheat Newsletter. XXI: 160.
214. Konzak, C. F. 1975. Induced genetic variation for improved protein. Annual Wheat Newsletter. XXI: 162.

215. Konzak, C. F. 1975. Proposal for development of international standard tests and scoring systems for quality and other evaluations in durum wheats. In: G. T. Scarascia-Mugnozza ed., Proc. of the Symp. on Genetics and Breeding of Durum Wheat, Bari, Italy, May 14-18, 1973. Library for the Faculty of Agriculture, Bari, National Institute for Nutrition, Rome. p. 561-562.
216. Konzak, C. F. and M. A. Davis. 1975. Durum wheat breeding and genetics. Annual Wheat Newsletter. XXI: 158-159.
217. Konzak, C. F. and M. A. Davis 1975. Preliminary quality analyses of an induced semidwarf mutant of Marfed spring wheat. Annual Wheat Newsletter. XXI: 163.
218. Konzak, C. F., M. A. Davis, G. W. Bruehl, K. J. Morrison, and P. Reisenauer. 1975. No title. 1974 Oat Newsletter. 25: 52.
219. Konzak, C. F., M. A. Davis, E. Donaldson, and M. Nagamitsu 1975. Development of facultative (cold hardy) spring wheats. Annual Wheat Newsletter. XXI: 156-158.
220. Konzak, C. F., M. A. Davis, E. Donaldson, and M. Nagamitsu. 1975. Protein improvement. Annual Wheat Newsletter. XXI: 159.
221. Konzak, C. F. and E. Donaldson. 1975. Analyses of parental sources for improved protein content and composition. Annual Wheat Newsletter. XXI: 159-160.
222. Konzak, C. F., E. Donaldson, and K. J. Morrison. 1975. Spring wheat in Washington. Annual Wheat Newsletter. XXI: 156.
223. Konzak, C. F., R. Hu, G. L. Rubenthaler, M. Sadam and W. C. Shuey. 1975. A rapid micro screening method for semolina color applicable to early generation materials. In: G. T. Scarascia-Mugnozza, ed., Proc. of the Symp. on Genetics and Breeding of Durum Wheat (Bari, 1973). Library of the Faculty of Agriculture, Bari, and National Institute for Nutrition, Rome. p. 617-631.
224. Konzak, C. F., M. Niknejad, I. Wickham and E. Donaldson. 1975. Mutagenic interaction of sodium azide on mutations induced in barley seeds treated with diethyl sulfate or N-methyl-N'-nitrosourea. Mutation Research. 30: 55-62.

225. Konzak, C. F., Mir Sadam and E. Donaldson. 1975. Inheritance and linkage in durum wheats of semidwarfing genes with low response to gibberellin A₃. In: G. T. Scarascia-Mugnozza, ed., Proc. of the Symp. on Genetics and Breeding of Durum Wheat (Bari, 1973). Library of the Faculty of Agriculture, Bari, and National Institute for Nutrition, Rome. p. 29-40.
226. Konzak, C. F., Tareke Behre, M. A. Davis, and Mir Sadam. 1975. Geographic origin and usefulness in breeding of Durums from Turkey and Ethiopia in the U.S.D.A. world wheat collection. In: G. T. Scarascia-Mugnozza, ed., Proc. of the Symp on Genetics and Breeding of Durum Wheat, Bari, Italy, May 14-18, 1973. Library for the Faculty of Agriculture, Bari, National Institute for Nutrition, Rome. p. 179-180.
227. Konzak, C. F., G. L. Rubenthaler, and E. Donaldson. 1975. Geographic origin and evaluation of genetic resources for improving the nutritional value of wheat protein. Agronomy Abstracts (1975 Annual Meetings, Univ. of Tennessee, Knoxville, Tennessee, August 24-30, 1975). American Society of Agronomy, Madison. p. 108.
228. Prestes, A. M., C. F. Konzak, and J. W. Hendrix. 1975. An improved seedling culture method for screening wheat for tolerance to toxic levels of aluminum. Agronomy Abstracts (1975 Annual Meetings, Univ. of Tennessee, Knoxville, Tennessee, August 24-30, 1975). American Society of Agronomy, Madison. p. 60.
229. Prestes, A. M. and C. F. Konzak. 1975. Genetic association of aluminum tolerance to high protein and leaf rust resistance in Atlas 66. Annual Wheat Newsletter. XXI: 162-163.
230. Warner, R. L. and C. F. Konzak. 1975. Nitrate reductase activity in wheat substitution lines. Annual Wheat Newsletter. XXI: 160-161.
231. Zadoks, J. C., T. T. Chang, and C. F. Konzak. 1975. A decimal code for the growth stages of cereals. Annual Wheat Newsletter. XXI: 9-16.
232. Konzak, C. F. 1976. Control of microorganisms infesting seeds used for laboratory studies. Barley Genetics Newsletter. 6: 96.
233. Konzak, C. F. 1976. New induced mutant semi-dwarfing gene source. Annual Wheat Newsletter XXII:123.
234. Konzak, C. F. 1976. Reciprocal cross differences. Annual Wheat Newsletter. XXII: 122-123.

235. Konzak, C. F. 1976. Regional facultative spring wheat nursery. Annual Wheat Newsletter. XXII: 123-124.
236. Konzak, C. F. 1976. A review of semi-dwarfing gene sources and a description of some new mutants useful for breeding short-stature wheats. In: Induced Mutations in Cross-Breeding (Proc. of an Advisory Group, Vienna, 1975). International Atomic Energy Agency, Vienna. p. 79-93. STI/PUB/447.
237. Konzak, C. F. and M. A. Davis. 1976. Durum research. Annual Wheat Newsletter. XXII: 125.
238. Konzak, C. F. and M. A. Davis. 1976. Oat research at Washington State University. 1975 Oat Newsletter. 26: 59.
239. Konzak, C. F. and E. Donaldson. 1976. Spring wheat in Washington State. Annual Wheat Newsletter. XXII: 124-125.
240. Konzak, C. F., E. Donaldson, M. Nagamitsu, M. A. Davis and G. L. Rubenthaler. 1976. Registration of Urquie wheat. Crop Science. 16: 742.
241. Konzak, C. F., Nguyen Van Mung, and G. L. Rubenthaler. 1976. Breeding for improved protein content and amino acid composition. Annual Wheat Newsletter. 22: 125-128.
242. Konzak, C. F., E. Polle and J. A. Kittrick. 1976. Screening several crops for aluminum tolerance. In: Madison J. Wright, ed., Plant Adaptation to Mineral Stress in Problem Soils (Proc. of a Workshop, Beltsville, 1976). Cornell University Agricultural Experiment Station, Ithaca, NY. p. 311-327.
243. Line, R. F., R. E. Allan and C. F. Konzak, 1976. Identifying and utilizing resistance to Puccinia striiformis in wheat. In: Induced Mutations for Disease Resistance in Crop Plants (Proc. of a Res. Coord. Meeting, Ames, 1975). International Atomic Energy Agency, Vienna. p. 151-158. IAEA Tech. Doc. 181.
244. Briggs, R. W. and C. F. Konzak. 1977. Objects and methods of treatment. In: Manual on Mutation Breeding, 2nd ed., Technical Reports Series No. 119. International Atomic Energy Agency, Vienna. p. 33-40. STI/DOC/10 119.
245. Conger, B. V., C. F. Konzak and R. A. Nilan. 1977. Methods of applying pre-and post-treatments. In: Manual on Mutation Breeding, 2nd ed., Technical Reports Series No. 119. International Atomic Energy Agency, Vienna. p.43-50. STI/DOC/10/119.

246. Conger, B. V., C. F. Konzak and R. A. Nilan. 1977. Radiation sensitivity and modifying factors. In: Manual on Mutation Breeding, 2nd ed., Technical Reports Series No. 119. International Atomic Energy Agency, Vienna. p.40-43. STI/DOC/10/119.
247. Favret, E. A., C. F. Konzak and A. Micke. 1977. Disease and pest resistance. In: Manual on Mutation Breeding, 2nd ed., Technical Reports Series No. 119. International Atomic Energy Agency, Vienna. p. 180-188. STI/DOC/10/119.
248. Hansel, H. and C. F. Konzak. 1977. Identification, evaluation and documentation of mutants. In: Manual on Mutation Breeding, 2nd ed., Technical Reports Series No. 119. International Atomic Energy Agency, Vienna. p. 142-146. STI/DOC/10/119.
249. Konzak, C. F. 1977. No title. 1977 Oat Newsletter. 28: 89.
250. Konzak, C. F. 1977. Genetic control of the content, amino acid composition, and processing properties of proteins in wheat. Advances in Genetics. 19: 407-582.
251. Konzak, C. F. and M. A. Davis. 1977. Spring wheat in Washington, 1976. Annual Wheat Newsletter. XXIII: 120.
252. Konzak, C. F., M. A. Davis, K. J. Morrison, and P. Reisenauer. 1977. Oats in Washington. 1976 Oat Newsletter. 27: 49.
253. Konzak, C. F., R. F. Line, R. E. Allan and J. F. Schafer. 1977. Guidelines for the production, evaluation, and use of induced resistance to stripe rust in wheat. In: Induced Mutations Against Plant Diseases (Proc. Symp. on the Use of Induced Mutations for Improving Disease Resistance in Crop Plants, Vienna, 1977). International Atomic Energy Agency, Vienna. p. 437-459. STI/PUB/462.
254. Konzak, C. F. and K. Mikaelson. 1977. Selecting parents and handling the M₁-M₂ generations for the selection of mutants. In: Manual on Mutation Breeding, 2nd ed., Technical Reports Series No. 119. International Atomic Energy Agency, Vienna. p. 125-138. STI/DOC/10/119.
255. Konzak, C. F. and K. R. Narayanan. 1977. Methods of pre- and post-treatments in chemical mutagenesis. In: Manual on Mutation Breeding, 2nd ed., Technical Reports Series No. 119. International Atomic Energy Agency, Vienna. p. 71-74. STI/DOC/10/119.
256. Konzak, C. F., Nguyen V. Mung, and G. L. Rubenthaler. 1977. Protein and DBAA values in a spring wheat cross. Annual Wheat Newsletter. XXIII: 121-122.

257. Konzak, C. F., R. A. Nilan and A. Kleinhofs. 1977. Artificial mutagenesis as an aid in overcoming genetic vulnerability of crop plants. In: Amir Muhammed, Rustem Aksel, and R. C. von Borstel, eds., Genetic Diversity in Plants (Proc. International Symposium on Genetic Control of Diversity in Plants, Lahore, Pakistan, 1976). Plenum Publishing Corporation, New York. p. 163-177.
258. Konzak, C. F. and G. L. Rubenthaler. 1977. Dual-purpose quality. Annual Wheat Newsletter. XXIII: 120-121.
259. Mikaelson, K. and C. F. Konzak. 1977. Examples of treatment procedures. In: Manual on Mutation Breeding, 2nd ed., Technical Reports Series No. 119. International Atomic Energy Agency, Vienna. p. 78-80. STI/DOC/10/119.
260. Narayanan, K. R., C. F. Konzak and C. Sander. 1977. Handling and disposal of chemical mutagens. In: Manual on Mutation Breeding, 2nd ed., Technical Reports Series No. 119. International Atomic Energy Agency, Vienna. p. 74-78. STI/DOC/10/119.
261. Nilan, R. A., A. Kleinhofs and C. F. Konzak. 1977. The role of induced mutation in supplementing natural genetic variability. Annals of the New York Academy of Sciences. 287: 367-384.
262. Konzak, C. F., N. V. Mung, R. L. Warner, G. L. Rubenthaler and P. L. Finney. 1978. Advances in technology and in genetics information for breeding improvements in wheat protein potentials. In: Seed Protein Improvement by Nuclear Techniques (Proc. Second Research Coordination Meeting on the Use of Aneuploids for Wheat Protein Improvement, Vienna, 1977). International Atomic Energy Agency, Vienna. p. 519-531. STI/PUB/479.
263. Polle, E., N. I. Hashmi, C. F. Konzak, and J. A. Kittrick. 1978. Varietal response to Mn and Al in wheat by rapid screening tests. Agronomy Abstracts (1978 Annual Meetings, Chicago, Illinois, Dec. 3-8, 1978). American Society of Agronomy, Madison. p. 160.
264. Polle, E., C. F. Konzak and J. A. Kittrick. 1978. Rapid screening of maize for tolerance to aluminum in breeding varieties better adapted to acid soils. U. S. Government Technical Series Bulletin No. 22, Dec. 1978. U. S. Printing Office 1979 280-931/FAS-55.
265. Polle, E., C. F. Konzak and J. A. Kittrick. 1978. Rapid screening of wheat for tolerance to aluminum in breeding varieties better adapted to acid soils. U. S. Government Technical Series Bulletin No. 21, Nov. 1978. U. S. Printing Office 1979 280-931/FAS-57.

266. Polle, E., C. F. Konzak and J. A. Kittrick. 1978. Visual detection of aluminum tolerance levels in wheat by hematoxylin staining of seedling roots. Crop Science. 18: 823-827.
267. Sarvella, Patricia and C. F. Konzak. 1978. Mutants of *Triticum monococcum*. II. Genetic stocks. Wheat Information Service. No. 45-46: 41-53.
268. Donaldson, E., R. A. Nilan and C. F. Konzak. 1979. The interaction of oxygen, radiation exposure and seed water content on γ -irradiated barley seeds. Environmental and Experimental Botany. 19: 153-164.
269. Donaldson, E., R. A. Nilan and C. F. Konzak. 1979. Minimum gamma-radiation exposure and oxygen concentration to produce post-irradiation oxygen-enhancement of damage in barley seeds. Environmental and Experimental Botany. 19: 165-173.
270. Gangadharan, C., C. F. Konzak, and B. L. Bruinsma. 1979. Possible genetic differences in the wheat kernel protein gradient. In: Seed Protein Improvement in Cereals and Grain Legumes, Vol. II (Proc. of a Symposium, Neuherberg, Sept. 4-8, 1978). International Atomic Energy Agency, Vienna. p. 432.
271. Konzak, C. F. 1979. Oat research at Washington State. 1978 Oat Newsletter. 29: 85.
272. Polle, E., C. F. Konzak, and J. A. Kittrick. 1979. Evidence for differential efficiency for phosphate utilization in wheat. Agronomy Abstracts (1979 Annual Meetings, Fort Collins, Colorado, Aug. 5-10, 1979). American Society of Agronomy, Madison. p. 72.
273. Awan, M. A., C. F. Konzak, J. N. Rutger and R. A. Nilan. 1980. Mutagenic effects of sodium azide in rice. Crop Science. 20: 663-668.
274. Donaldson, E., R. A. Nilan and C. F. Konzak. 1980. Influence of oxygen at high pressure on the induction of damage in barley seeds by gamma radiation. Environmental and Experimental Botany. 20: 11-19.
275. Konzak, C. F., M. A. Davis, and M. Wilson. 1980. A partially automated harvest sample data collection system. 1979 Barley Newsletter. 23: 54-56.
276. Duwayri, M. A., E. Polle, and C. F. Konzak. 1981. Screening of wheat genotypes for drought tolerance. Agronomy Abstracts (73rd Annual Meetings, Atlanta, Georgia, Nov. 29-Dec. 4, 1981). American Society of Agronomy, Madison. p. 10.

277. Koehler, T. J., C. F. Konzak, and E. Polle. 1981. Phosphorus efficient genotypes from phenotypic selections. Annual Wheat Newsletter. XXVII: 154-155.
278. Koehler, T., E. Polle, C. Konzak, and J. Kittrick. 1981. Evaluation of wheat tolerance to low soil phosphorus. Agronomy Abstracts (73rd Annual Meetings, Atlanta, Georgia, Nov. 29-Dec. 4, 1981). American Society of Agronomy, Madison. p. 43.
279. Konzak, C. F. 1981. New cultivars. News. Annual Wheat Newsletter. XXVII: 154.
280. Konzak, C. F. 1981. Induced mutations for genetic analyses and improvement of wheat. In: Induced Mutations--A Tool in Plant Improvement (Proc. Int. Symp. on Induced Mutations as a Tool for Crop Plant Improvement, Vienna, 1981). International Atomic Energy Agency, Vienna. p. 469-488. STI/PUB/591.
281. Konzak, C. F., M. A. Davis, and M. R. Wilson. 1981. Spring and facultative wheats. Annual Wheat Newsletter. XXVII: 152-153.
282. Konzak, C. F. and G. L. Rubenthaler 1981. Progress in protein content capacity improvement in HRS wheats. Annual Wheat Newsletter. XXVII: 153.
283. Konzak, C. F. and M. R. Wilson. 1981. New scale for electronic transfer of sample identification and weight. Annual Wheat Newsletter. XXVII: 153.
284. Dahnous, D., G. T. Vigue, A. G. Law, C. F. Konzak and D. G. Miller. 1982. Height and yield response of selected wheat, barley, and triticale cultivars to ethephon. Agronomy Journal. 74: 580-582.
285. Donaldson, E., R. A. Nilan and C. F. Konzak. 1982. Rate of oxygen effect reactions in irradiated barley seeds. Environmental and Experimental Botany. 22: 15-21.
286. Jaradat, A. and C. F. Konzak. 1982. Screening of wheat genotypes for drought resistance. Agronomy Abstracts (74th Annual Meetings, Anaheim, California, Nov. 28-Dec. 3, 1982). American Society of Agronomy, Madison. p. 70.
287. Konzak, C. F. 1982. Das vollautomatische ein-mann-erntesystem fur die ernte von versuchsparzellen. Arbeitstagung, 1982, der Arbeitsgemeinschaft der Saatzuchtler, "Vereinigung osterreichischer Pflanzenzuchterll", Gumpenstein, Austria, November 23-25, 1982. Bundesversuchsanstalt fur alpenlandische Landwirtschaft, Gumpenstein. p. 281-283.

288. Konzak, C. F. 1982. Evaluation and genetic analysis of semi-dwarf mutants of wheat. In: Semi-Dwarf Cereal Mutants and Their Use in Cross-Breeding (Proc. Research Coordination Meeting Organized by Joint FAO/IAEA, Vienna, 1981). International Atomic Energy Agency, Vienna. p. 25-37. IAEA-TECDOC-268.
289. Konzak, C. F. 1982. Spring wheat. Annual Wheat Newsletter. XXVIII: 156.
290. Konzak, C. F., M. A. Davis, and M. R. Wilson. 1982. A one person plot combine harvest and data acquisition system. Agronomy Abstracts (74th Annual Meetings, Anaheim, California, Nov. 28-Dec. 3, 1982). American Society of Agronomy, Madison. p. 72.
291. Konzak, C. F., M. A. Davis, and M. R. Wilson. 1982. One person research plot combine harvest and data collection system. Annual Wheat Newsletter. XXVIII: 155-156.
292. Konzak, C. F. and G. L. Rubenthaler. 1982. Protein improvement in cereals. I. Wheat. In: Induced Mutants for Cereal Grain Protein Improvement (Proc. Research Coordination Meeting Organized by Joint FAO/IAEA, Nicosia, Cyprus, 1980). International Atomic Energy Agency, Vienna. p. 143-151. IAEA-TECDOC-259.
293. Mansur, L., C. F. Konzak, A. Grama, and A. Blum. 1982. Computer analysis of the storage protein genetic variability in *Triticum dicoccoides* collections. Agronomy Abstracts (74th Annual Meetings, Anaheim, California, Nov. 28-Dec. 3, 1982). American Society of Agronomy, Madison. p. 74-75.
294. Yusef, H., C. F. Konzak, and J. D. Maguire. 1982. Wheat seedling growth at cold temperatures. Annual Wheat Newsletter. XXVIII: 156.
295. Betzwar, W. and C. F. Konzak. 1983. New field plot research equipment: For automatic precision planting of seeds, and for one person harvesting and data acquisition. In: Sadao Sakamoto, ed., Proc. Sixth International Wheat Genetics Symposium (Kyoto, Japan, Nov. 28-Dec. 3, 1983). Plant Germ-Plasm Institute, Faculty of Agriculture, Kyoto University, Kyoto, Japan. p. 769-774.
296. Heuer, K., L. Mansur, and C. F. Konzak. 1983. Computer programs for electrophoretic gel analysis. Agronomy Abstracts (75th Annual Meetings, Washington, D.C., Aug. 14-19, 1983). American Society of Agronomy, Madison. p. 72-73.

297. Jaradat, A. and C. F. Konzak. 1983. Evaluation of wheat genotypes for drought tolerance and yield response. Agronomy Abstracts. (75th Annual Meetings, Washington, DC, Aug. 14-19, 1983). American Society of Agronomy, Madison. p. 67.
298. Jaradat, A. and C. F. Konzak. 1983. Screening of wheat genotypes for drought tolerance: 1. Excised-leaf water retention. Cereal Research Communications. 11(3-4): 179-186.
299. Jaradat, A. and C. F. Konzak. 1983. Screening of wheat genotypes for drought tolerance: 2. Soil-water depletion patterns. Cereal Research Communications. 11(3-4): 187-195.
300. Konzak, C. F. and R. E. Allan. 1983. Increasing cytoplasm genetic variability in wheat breeding. In: Proc. Sixth International Wheat Genetics Symposium, (Kyoto, Japan, Nov. 28-Dec. 3, 1983). Plant Germ-Plasm Institute, Faculty of Agriculture, Kyoto University, Kyoto, Japan. p. 683-690.
301. Konzak, C. F., M. A. Davis, and M. R. Wilson. 1983. Combine harvest and data acquisition by one person. Crop Science. 23: 1205-1208.
302. Konzak, C. F., M. A. Davis, and M. R. Wilson. 1983. Research plot harvesting and data acquisition by one person. In: Proc. 10th Eucarpia Congress. 1983.
303. Konzak, C. F., R. F. Line, and R. E. Allan. 1983. Induced mutations for disease resistance in wheat (Summary report). In: Induced Mutations for Disease Resistance in Crop Plants II (Proc. Res. Coord. Meet., Riso, 1981). International Atomic Energy Agency, Vienna. p. 101-103. STI/PUB/633.
304. Mansur, L. M. and C. F. Konzak, 1983. Computer analysis of the kernel protein genetic variability in *Triticum dicoccoides* collections. Annual Wheat Newsletter. XXIX: 154-155.
305. Wilson, M. R., A. J. Ciha, and C. F. Konzak. 1983. Performance of spring wheat genotypes under reduced tillage systems. Western Soc. of Crop Science Abstracts. p. 8.
306. Andersen, T. M., C. F. Konzak, and D. F. Bezdicsek. 1984. Spring wheat genotype response to inoculation with associative nitrogen fixing bacteria. Agronomy Abstracts (76th Annual Meetings, Las Vegas, Nevada. Nov. 25-30, 1984). American Society of Agronomy, Madison. p. 56.

307. Jaradat, A. A. and C. F. Konzak. 1984. Genotype and location selection strategies in a wheat breeding program. Agronomy Abstracts (76th Annual Meetings, Las Vegas, Nevada, Nov. 25-30, 1984). American Society of Agronomy, Madison. p. 72.
308. Konzak, C. F. 1984. New chaff color mutant of *T. turgidum* durum. Annual Wheat Newsletter. XXX: 170.
309. Konzak, C. F. 1984. Role of induced mutations. In: P. B. Vose and S.G. Blixt, eds., Crop Breeding, A Contemporary Basis. Chapter 9. Pergamon Press, London and New York. p. 216-292.
310. Konzak, C. F., M. A. Davis, and M. R. Wilson. 1984. Cultivar development. Progress in breeds of high protein hard red spring wheats. One person plot combine harvest systems. Annual Wheat Newsletter. XXX: 170.
311. Konzak, C. F., M. A. Davis, and M. R. Wilson. 1984. One person plot combine harvest systems. 1983 Barley Newsletter. 27: 103.
312. Konzak, C. F., M. A. Davis, and M. R. Wilson. 1984. One person plot combine harvest systems. 1983 Oat Newsletter. 34: 18.
313. Konzak, C. F., M. A. Davis, and M. R. Wilson. 1984. Die Ernte von Versuchsparzellen mit dem vollautomatischen Ein-Mann-Erntesystem (Research plot harvest and data acquisition by one person). EDV in Medizin und Biologie. 15(2): 41-43.
314. Konzak, C. F., A. Kleinhofs, and S. E. Ullrich. 1984. Induced mutations in seed-propagated crops. In: Jules Janick, ed., Plant Breeding Reviews. Vol. 2, chapter 2. AVI Publishing Co. Inc., Westport, CT. p. 13-72.
315. Konzak, C. F. and G. L. Rubenthaler. 1984. Breeding high yielding, high protein spring wheats - Problems, progress and approaches to further advances. In: Cereal Grain Protein Improvement (Proc. Final Research Co-ordination Meeting of the FAO/IAEA/GSF/SIDA Coordinated Research Programme, Vienna, Dec. 1982). International Atomic Energy Agency, Vienna. p. 129-144. STI/PUB/664.
316. Konzak, C. F., M. R. Wilson and P. A. Franks. 1984. Progress in the evaluation, use in breeding, and genetic analysis of semi-dwarf mutants of wheat. In: Semi-Dwarf Cereal Mutants and Their Use in Cross-Breeding II (Proc. of Research Coordination Meeting on Evaluation of Semi-Dwarf Mutants for Cross Breeding, Davis, 1982). International Atomic Energy Agency, Vienna. p. 39-50. IAEA-TECDOC-307.

317. Mansur-Vergara, L., C. F. Konzak, Z. K. Gerechter-Amitai, A. Grama, and A. Blum. 1984. A computer-assisted examination of the storage protein genetic variation in 841 accessions of *Triticum dicoccoides*. Theoretical Applied Genetics. 69: 79-86.
318. Polle, E., C. F. Konzak, and J. A. Kittrick. 1984. Phosphate deficiency stress tolerance in wheat. Annual Wheat Newsletter. XXX: 170-171.
319. Andersen, T. M. and C. F. Konzak. 1985. Spring wheat interactions with *Azospirillum brasilense*. Annual Wheat Newsletter. 31: 187.
320. Konzak, C. F. 1985. Breeding high protein HRS wheats. Annual Wheat Newsletter. 31: 188.
321. Konzak, C. F. 1985. Progress in nucleo-cytoplasmic hybrid (alloplasmic) wheat breeding. Annual Wheat Newsletter. 31: 187-188.
322. Konzak, C. F. 1985. Oats in Washington. 1984 Oat Newsletter. 35: 43.
323. Konzak, C. F. and E. Polle. 1985. Al toxicity tolerance, Mn toxicity, and P use efficiency (P deficiency tolerance) in common wheat, *Triticum aestivum* L. Agronomy Abstracts. (77th Annual Meeting, Chicago, Illinois, Dec. 1-6, 1985). American Society of Agronomy, Madison. p. 60.
324. Peterson, C. J., Jr., R. E. Allan, C. F. Konzak, and P. Chevalier. 1985. Breeding small grain cultivars for changing management systems. Agronomy Abstracts. (77th Annual Meeting, Chicago, Illinois, Dec. 1-6, 1985). American Society of Agronomy, Madison. p. 66.
325. Polle, E. and C. F. Konzak. 1985. A single scale for Al tolerance in cereals. Agronomy Abstracts. (77th Annual Meeting, Chicago, Illinois, Dec. 1-6, 1985). American Society of Agronomy, Madison. p. 67.
326. Polle, E., C. F. Konzak, and J. A. Kittrick. 1985. Mn stress tolerance. P stress tolerance. Annual Wheat Newsletter. 31: 187.
327. Andersen, T., C. F. Konzak, and E. A. Polle. 1986. Screening spring wheat for drought tolerance. Annual Wheat Newsletter. 32: 188.
328. Hamat, H. B., A. Kleinhofs, and C. F. Konzak. 1986. Characterization of nitrate reductase genomic clones from rice (*Oryza sativa*). Agronomy Abstracts. (78th Annual Meeting, New Orleans, Louisiana, Nov. 30-Dec. 5, 1986). American Society of Agronomy, Madison. p. 148. 2

329. Johnston, W. J., H. A. Yusuf, C. F. Konzak and J. D. Maguire. 1986. Tetrazolium chloride test for spring wheat seedling vigor at low temperatures. Crop Science. 26: 167-169.
330. Konzak, C. F. 1986. Waverly. WAWG Wheat Life. February, 1986. p. 12-13.
331. Konzak, C. F. 1986. Spring wheat. Dual quality wheats. Possible new durum mutant. Annual Wheat Newsletter. 32: 187-188.
332. Konzak, C. F. and K. J. Morrison. 1986. Oats in Washington. 1985 Oat Newsletter. 36: 38.
333. Mansur-Vergara, L., C. F. Konzak, Z. K. Gerechter-Amitai, A. Grama, and A. Blum. 1986. Quantitative variation in the kernel proteins among 841 accessions of *Triticum dicoccoides* estimated by SDS-PAGE. Theoretical and Applied Genetics. 72: 296-301.
334. Andersen, T. M., E. Polle, and C. F. Konzak. 1987. Screening spring wheat for drought tolerance. In: H. W. Gabelman and B. C. Loughman, eds., Genetic Aspects of Plant Mineral Nutrition (Proc. Symposium, Madison, 1985). Martinus Nijhoff Publishers, Dordrecht/Boston/Lancaster. p. 79-87.
335. Konzak, C. F. 1987. Washington State University spring wheat research. Annual Wheat Newsletter. 33: 172-175.
336. Konzak, C. F. and K. J. Morrison. 1987. Oats in Washington. 1986 Oat Newsletter. 37: 131.
337. Konzak, C. F. 1987. Mutations and mutation breeding. In: E. G. Heyne, ed., Wheat and Wheat Improvement -- Agronomy Monograph No. 13 (2nd ed.), Section 7B. American Society of Agronomy, Madison. p. 428-443.
338. Konzak, C. F. 1987. Spring wheat stats reports. WAWG Wheat Life. , February, 1987. p. 10-11.
339. Konzak, C. F., D. W. Sunderman, E. A. Polle, and W. L. McCuistion. 1987. Spring wheat plant design for conservation tillage crop management systems. In: L. F. Elliott, R. J. Cook, M. Molnau, R. E. Witters, and D. L. Young, eds., STEEP-Conservation Concepts and Accomplishments (Symposium, Spokane, May 20-21, 1986). Washington State University Publications, Pullman, WA. p. 247-272. ARC1570, 5570, 1568.

340. Konzak, C. F. 1988. Genetic analysis, genetic improvement and evaluation of induced semi-dwarf mutants in wheat. In: Semi-Dwarf Cereal Mutants and Their Use in Cross-Breeding III (Proc. of Final Research Co-ordination Meeting on Evaluation of Semi-dwarf Cereal Mutants for Cross Breeding, Rome, 1985). International Atomic Energy Agency, Vienna. p. 77-94. IAEA-TECDOC-455.
341. Konzak, C. F. 1988. Spring wheat performance tallied. WAWG Wheat Life. January, 1988. p. 14-15, 18.
342. Konzak, C. F. and L. R. Joppa. 1988. The inheritance and chromosomal location of a gene for chocolate chaff in durum wheat. Genome. 30: 229-233.
343. Konzak, C. F. 1989. Exploitation and analysis of heterosis in wheat with induced mutations. In: M. Maluszynski, ed., Current Options for Cereal Improvement: Doubled Haploids, Mutants and Heterosis (Proc. Symp., Guelph, 1986). Kluwer Academic Publishers, Dordrecht/Boston/London. p. 97-113.
344. Zhou, H. and C. F. Konzak, 1989. Improvement of anther culture methods for haploid production in wheat. Crop Science. 29: 817-821. ARC1568, 3571.
345. Polle, E. A. and C. F. Konzak. 1990. Genetics and breeding of cereals for acid soils and nutrient efficiency. In: V. C. Baligar and R. R. Duncan, eds., Crops as Enhancers of Nutrient Use, John Wiley & Sons, Inc., New York. p. 81-130 ARC1568.
346. Ball, S.T., C.F. Konzak, and B.F. Frazier. 1990. Remotely sensed soil spatial variability data for crop breeding trials. Agronomy Abstracts. 1990 Annual Meetings. p. 14.
347. Ball, S.T., G.S. Campbell, C.F. Konzak, and C. Reece. 1990. Pollination bags effects on wheat heads determined by energy budget equations. Agronomy Abstracts. 1990 Annual Meetings. p. 79.
348. Konzak, C.F., H. Zhou, and H. Ekiz. 1990. Nuclear x cytoplasm genetic interaction in *T. aestivum* wheats for response to anther culture. Agronomy Abstracts. 1990 Annual Meetings. p. 97.
349. Konzak, C.F., and H. Zhou. 1990. Physical conditions of potato 4 culture media affecting culture response of *T. aestivum* wheat anthers. Agronomy Abstracts. 1990 Annual Meetings. p. 199.

350. Konzak, C. F. and Huaping Zhou, 1991. Anther culture methods for doubled haploid production in wheat. In: Proc. Second FAO/IAEA Research Co-ordination Meeting on the Use of Induced Mutations in Connection with Haploids and Heterosis in Cereals, Katowice, Poland, July 25-29, 1988. Cereal Research Communications. 19:1 47-164. ARC1568, 1570, 3571, 5570.
351. Zhou, H., Y. Zheng and C. F. Konzak, 1991. Osmotic potential of media affecting green plant percentage in wheat anther culture. Plant Cell Rep. 10: 63-66. ARC3571.
352. Ekiz, H. and C. F. Konzak. 1991. Nuclear and cytoplasmic control of anther culture response in wheat. I. Analysis of alloplasmic lines Crop Science. 31: 1421-1427. ARC1568, 1570, 3571.
353. Ekiz, H. and C. F. Konzak. 1991. Nuclear and cytoplasmic control of anther culture response in wheat. II. Common wheat x alloplasmic lines. Crop Science. 31: 1427-1431. ARC1568, 1570, 3571.
354. Ekiz, H. and C. F. Konzak. 1991. Nuclear and cytoplasmic control of anther culture responses in wheat. III. Common wheat crosses. Crop Science. 31: 1432-1436. ARC1568, 1570, 3571.
355. Ball, S.T., G.S. Campbell, B.E. Frazier, and C.F. Konzak. 1991. Applications of crop modeling in a wheat breeding program. Agronomy Abstracts. 1991 Annual Meetings. p. 86.
356. Ball, S.T., B.E. Frazier, G.S. Campbell, and C.F. Konzak. 1991. Breeding from 1000 feet. Using aerial photography, combined with spatial methods, to determine spatial variation. Agronomy Abstracts. 1991 Annual Meetings. p. 86.
357. Konzak, C.F., and H. Zhou. 1991. Breeding for Russian Wheat Aphid resistance by haploid methods. Agronomy Abstracts. 1991 Annual Meetings. p. 102.
358. Zhou, H., and C.F. Konzak. 1991. Protoplast culture and genetic engineering of wheat. Agronomy Abstracts. 1991 Annual Meetings. p. 203.

359. Konzak, C. F., H. Ekiz, H. Zhou, and M. A. Davis. 1991. Nuclear and cytoplasmic control of anther culture responses in wheat--potential for use in breeding. In: T. Sasakuma and T. Kinoshita (eds). Nuclear and Organellar Genomes of Wheat Species. (Proc. Kihara Memorial Symposium on cytoplasmic engineering in wheat, Hokkaido University, Sapporo, Japan, July 3-6, 1991). P. 251-266. Kihara Memorial Yokohama Foundation, Yokohama, Japan. ARC: 1568, 1570, 3571, 5570.
360. Zhou, H., S.T. Ball, and C.F. Konzak. 1992. Functional properties of ficoll and their influence on anther culture responses of wheat. Plant Cell, Tissue, and Organ Culture. 30: 77-83. ARC 3571.
361. Ball, S.T., H. Zhou, and C.F. Konzak. 1992. Sucrose concentration and its relationship to anther culture of wheat. Crop Science. 32: 149-154. ARC: 3571.
362. Ball, S.T., G.S. Campbell and C.F. Konzak. 1992. Effects of pollination bags on wheat spike temperature. Crop Science. 32: 1155-1159. ARC: 1568, 1570, 5570.
363. Ball, S.T., B. E. Frazier, and C. F. Konzak. 1992. Relationship between yield and remotely sensed data in a spring wheat variety trial. ASPRS/ACSM/RT 4:415-422. Am. Soc. Photogrammetry and Remote Sensing, Bethesda, MD. ARC0323, 2670, 5568, 5570.
364. Ball, S. T., B. E. Frazier, and C. F. Konzak. 1992. Using remote sensing to evaluate spatial dependence in a wheat breeding trial. Archives of Photogrammetry and Remote Sensing. 29:516-519. Am. Soc. Photogrammetry and Remote Sensing, Bethesda, MD. ARC 0323, 2670, 5568, 5570.
365. Ball, S. T., D.J. Mulla, and C. F. Konzak. 1992. Removing spatial heterogeneity in wheat variety trials. Agronomy Abstracts. 1992 Annual Meetings. p. 89. ARC 5568, 5570.
366. M. A. Davis, H. Zhou, and C. F. Konzak. 1992. Dihaploid production as a complementary method for spring wheat breeding. Agronomy Abstracts. 1992 Annual Meeting. p. 93. ARC 3571, 5568, 5570.
367. Konzak, C. F. and H. Zhou. 1992. Genetically controlled toxin resistance: a conceptually new mechanism for Russian Wheat Aphid damage control. Agronomy Abstracts. 1992 Annual Meetings. p. 104. ARC3571.
368. Zhou, H. and C. F. Konzak. 1992. Genetic transformation of wheat by PEG, liposome, and electroporation methods. Agronomy Abstracts. 1992 Annual Meetings. p. 199. ARC3571.

369. Ball, S. T. and C. F. Konzak. 1992. Using crop modeling in a spring wheat breeding program. Cereal Research Communications. 20: 279-285. ARC1570, 1568.
370. Zhou, H. and C. F. Konzak. 1992. Genetic Control of green plant regeneration from anther culture of wheat. Genome. 35: 957-961. ARC1568, 3571.

FOR PROJ. REPORT:

371. Ball, S. T. 1992. Misuse of multiple range tests in crop science research. Cereal Research Communications. 20: 287-293. ARC1570, 1568.
372. Ball, S. T. G. S. Campbell, B. E. Frazier, and C. F. Konzak. 1993. Relationships between yield and remotely sensed data in a wheat breeding trial. Agronomy Journal. 84: ARC0323, 2670, 5568, 5570.
373. Ekiz, H. and C. F. Konzak. 1993. Effects of different light applications on anther culture response of spring bread wheat (*Triticum aestivum* L.). Doga Turkish Journal of Agricultural and Forestry. 17:511-520 (In Turkish) ARC1570, 1568, 3571.
374. Ekiz, H. and C. F. Konzak. 1993. Nuclear x cytoplasm interactions controlling anther culture response in wheat. IV. Preliminary Diallel Analysis of Heritability. Plant Breeding. (In Press) ARC3571.
375. Ball, S. T., H. Zhou and C. F. Konzak. 1993. Influence of 2,4-D, IAA, and duration of callus induction in anther cultures of spring wheat. Plant Science. 90: 195-200. ARC1568, 3571.

Submitted:

376. Ball, S. T., D. J. Mulla, B. E. Frazier, and C. F. Konzak. 1993. Statistical analysis of spatial variability in wheat. Evaluating the independence of errors with variograms. Crop Science. 33:ARC1570, 1568, 5570, ARC0323, 2670, 5568, 5570.
377. Ball, S. T., D. J. Mulla, B. E. Frazier, and C. F. Konzak. 1993. Statistical analysis of spatial variability in wheat. II. Removing the effects of spatial dependence using cross-validation. Crop Science. 33: ARC0323, 2670, 5568, 5570.
378. Ball, S. T., M. C. Wang, B. E. Frazier, and C. F. Konzak. Statistical analysis of crop and soil reflectance in wheat breeding trials. Plant Breeding. ARC0323, 2670, 5568, 5570.

379. Ball, S. T., D. J. Mulla, C. F. Konzak. 1993. Spatial Heterogeneity Affects Variety Trial Interpretation. Crop Science. Vol. 33, No. 5: 931-935.
380. Ball, S. T., C. F. Konzak. 1993. Relationship between Grain Yield and Remotely-sensed Data in Wheat Breeding Experiments. Plant Breeding. Nr. W 132 Pfl. 679.
381. Zheng, Y., W. Liu, Y. Weng, E. Polle, and C.F. Konzak. Culture of freshly isolated wheat (*Triticum aestivum* L.) microspores treated with inducer chemical. Plant Cell Reports. In press.
382. Liu, Weiguo, Y. Zheng, E. Polle, and C.F. Konzak. 2001. A highly efficient method for production of doubled haploids in wheat (*Triticum aestivum* L.) by microspore culture. Crop Science. Accepted for publication.

In Preparation:

383. Polle, E., P. A. Franks, C. F. Konzak, and J. A. Kittrick. Aluminum stress tolerance in barley, wheat, triticale, and rye. Plant and Soil.
384. Polle, E., C. F. Konzak, and J. A. Kittrick. Manganese stress tolerance screening in wheat and barley. Plant and Soil.

Manuscripts submitted and in progress as of August 20, 2001:

385. Zheng, Y., W. Liu, Y. Weng, E. Polle, and C.F. Konzak. The effects of ovary conditioned medium on microspore embryogenesis in common wheat (*Triticum aestivum* L.). Plant Cell Reports. In review.
386. Liu, W., Y. Zheng, E. Polle, C.F. Konzak. High quality embryoid production via isolated microspore culture in bread wheat (*Triticum aestivum* L.). Plant Cell Reports. In revision.